

REMARKS

Claims 1-43 remain pending in the application.

Claims 1-43 over Milliken and Mangin

In the Office Action, claims 1-43 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,978,384 to Milliken ("Milliken") in view of U.S. Patent Appl. Pub. No. 2001/0017844 to Mangin ("Mangin"). The Applicants respectfully traverse the rejection.

Claims 1-43 recite **adjusting a size of a range** of acceptable nonce values within a **single** acceptance window or a **single** replay mask, where the **size of the range is based on a largest nonce value yet seen**.

The Examiner acknowledged that Milliken fails to teach adjusting a size of a window based on a largest nonce value yet seen. (see Office Action, page 3) However the reason Milliken fails to teach such features is that Milliken teaches varying a size of a window based on the "expected data rate (or packet rate) or the expected maximum delay change associated with a packet reordering event in a network". (see col. 3, lines 56-61) A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would **lead away** from the claimed invention. MPEP §2141.02 (citing W.L. Gore & Assoc. v. Garlock, Inc., 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)). Thus, Milliken's invention addresses problems associated with data rates and data delays. Milliken **teaches away** from adjusting a size of a window based on a largest nonce value yet seen by instead teaching varying a size of a window based on the "expected data rate (or packet rate) or the expected maximum delay change associated with a packet reordering event in a network".

Moreover, the proposed modification or combination of Milliken and Mangin would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. MPEP § 2143.01 (citing In re Ratti, 123 USPQ 349 (CCPA 1959). To operate as intended to overcome his disclosed problem Milliken specifically requires varying a size of a window based data rates and

data delays. Theoretically modifying Milliken to adjust a size of a window based on a largest nonce value yet seen, as alleged by the Examiner, would fail to address Milliken's problems associated with data rates or data delays and would therefore change the principle of operation of Milliken. Such a theoretical modification is **improper**.

The Office Action alleged that "Mangin teaches a sliding window with a varying size based on the largest nonce value yet seen (see paragraph [0028] where the last transmitted sequence number is the largest nonce value yet seen)." (see Office Action, page 3) However, Applicants' claims fail to recite a sliding window with a varying size. Although Applicants' invention could be used with a sliding window with a varying size.

Mangin at paragraph [0028] teaches:

[0028] b) controlling a window size parameter contained in said acknowledgement segment on the basis of the difference between, firstly, a first context value associated with the TCP connection, defined as being the sequence number of the last segment that was transmitted from said given multiplexing node on the down link (sender to receiver) of the connection, to which the length of said segment is added and, secondly, the sequence number indicated in the acknowledgement segment;

Thus, Mangin teaches controlling a window size parameter based on the sequence number of the last segment and, secondly, the sequence number indicated in the acknowledgement segment. Mangin fails to disclose, teach or suggest determination of a largest nonce value yet seen, much less **adjust** a size of a range of acceptable nonce values within a **single** acceptance window or a **single** replay mask based on such a value, as claimed.

Moreover, for out of order sequence numbers, the last segment that Mangin teaches, can have a sequence number that is smaller than a previous segment. For out of order sequence numbers, Mangin's last segment will have instances where it does **NOT** have the largest nonce value yet seen. For out of order sequence numbers, Mangin fails to address an instance where the last segment has a sequence number smaller than previously received sequence numbers, and thus a previous segment actually has a sequence number **larger** than the last sequence number. Mangin fails to address such a situation, much

less provide a solution for such a situation. Mangin fails to determine a largest nonce value yet seen, much less disclose, teach or suggest **adjusting a size of a range** of acceptable nonce values within a **single** acceptance window or a **single** replay mask, where the size of the range is based on a largest nonce value yet seen, as recited by claims 1-43.

Milliken and Mangin, either alone or in combination, fail to disclose, teach or suggest **adjusting a size of a range** of acceptable nonce values within a **single** acceptance window or a **single** replay mask, where the size of the range is based on a largest nonce value yet seen, as recited by claims 1-43.

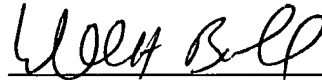
A benefit of adjusting a size of range of acceptable nonce values within a **single** acceptance window or a **single** replay mask based on a largest nonce value yet seen is, e.g., to reduce confusion between sessions. Adjusting the size of a range of a **single** acceptance window or a **single** replay mask, such as when starting a new session or when resetting a nonce value, permits new advantages. For instance, a previous session's large nonce value may play havoc on a new session starting with small nonce values. When switching sessions to restrict acceptance of a previous session's large nonce values the inventors have discovered that there are advantages to narrow an acceptance window or replay mask. Then once a session is underway, it is found that a single acceptance window or a single replay mask should be increased to prevent unnecessary rejection of data associated with nonce values. The cited prior art fails to disclose or suggest the claimed features.

Accordingly, for at least all the above reasons, claims 1-43 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William H. Bollman", is written over a horizontal line.

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